



MAP CODE: P2b

Gas Hydrate Samples

Reference: Shipboard Scientific Party, 1997, Site 1041: Proceedings, Ocean Drilling Program, Initial Reports, v. 170, p. 153-188.

Geographic/Geologic Location:

Pacific Ocean

Middle America Trench, an active convergent margin

Offshore from Costa Rica, continental slope

ODP Leg 170, Site 1041

Core/Sample Count: 9 samples

Latitude/Longitude: 09°44.0'N/86°06.9'W

Water Depth: 3306 m

Sediment Depth: 199-259 meters below sea floor (mbsf)

Description of Gas Hydrate: "At this site, gas hydrate is mostly concentrated between about 120 and 280 mbsf, the zone of highest TOC content of 1-2.5 wt%. Its primary mode of occurrence is disseminated, with very thin sheets of gas hydrate filling micro-fractures, as indicated by the almost constant salinity and chlorinity in this depth interval.

Analytical Results: The gas-hydrate sample analyzed within this interval (120-280 mbsf) is composed mainly of methane accompanied by small amounts of the higher molecular weight hydrocarbons ethane and propane. The volumetric ratio of gas to water ranged from 120 to 140."

Inferred Evidence for Gas Hydrate: See Map Code P2a.